

Notice of Allowability

Application No.

09/771,374

Applicant(s)

MEHTA, KALPESH
DHANVANTRAI

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to remarks filed 6/12/2006 and interview on 7/28/2006.
2. ☒ The allowed claim(s) is/are 4,5,9,10,14,15 and 17-20, now renumbered as claims 1-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 7/28/2006.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John F. Conroy (Reg. No. 45,485) on July 29, 2006.

The application has been amended as follows:

- a. Claim 9, line 1, replace "The technique" with --The article--; and
- b. Claim 9, line 1, replace "The technique" with --The article--.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior art of record does not expressly teach or render obvious the invention a recited in independent claims 18, 19 and 20.

The prior art discloses a system for managing shared resource in a parallel processing system including assigning an access value [col. 6, line 58 – col. 7, line 3] and a relative priority value [col. 4, line 66 - col. 5, line 21] to each of a plurality of computer processes [col. 4, lines 20 – 35] which request access to a shared computer resource [col. 4, lines 51 – 65], first providing access to processes whose access value represents high priority [col. 5, lines 22 – 56] and whose access value represents that

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access should still be granted [col. 6, line 58 - col. 7, line 3], and after granting each access, adjusting an access value associated with said each access, to indicate that additional access has been granted [col. 6, line 58 - col. 7, line 3], determining that all high priority requests have access values that indicate that no additional access should be granted [col. 4, line 66 – col. 5, line 21], responsive to said determining, providing access to low priority requests whose access values represent that access should be granted, and adjusting access values after granting the access [col. 6, line 58 - col. 7, line 3]. However, the prior art does not disclose performing, within one access cycle, the steps of: providing access to processes whose access value represents high priority and whose access value represents that access should still be granted, and determining that all high priority requests have access values that indicate that no additional access should be granted, providing access to low priority requests whose access values represent that access should be granted. In addition, the prior art does not disclose after determining that both the high priority requests and low priority requests each have access values that represent no further access should be granted, starting a new access cycle with new access values and priority values. Klappholz discloses resource allocation to be an ongoing, continuous affair, with processes being moved one-by-one from each class queue to a processor and they do not appear to be any cycles in which access is provided to processes [p. 9, lines 10 – 18 of response filed 06/12/2006]. Klappholz discloses a scheduling cycle in which the scheduler program checks ready queues 31 to determine whether there is a process ready to be run [step 80, Fig. 6; col. 7, line 56 – col. 8, line 29]. Therefore, Klappholz discloses granting access to one

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process during each cycle and does not disclose dividing an access cycle into multiple parts by assigning access counters to each process for a given access cycle so that the plurality of processes can access a resource within one access cycle.

In addition, the prior art of record does not provide a basis of evidence for asserting a motivation that one of ordinary skill level in the art at the time the invention was made would have integrated or modified the system for managing shared resource access to incorporate the features of performing, within one access cycle, the steps of: providing access to processes whose access value represents high priority and whose access value represents that access should still be granted, and determining that all high priority requests have access values that indicate that no additional access should be granted, providing access to low priority requests whose access values represent that access should be granted as recited in the context of independent claims 18, 19 and 20. The prior art of record also does not provide a basis of evidence for asserting a motivation that one of ordinary skill level in the art at the time the invention was made would have integrated or modified the system for managing shared resource access to incorporate the features determining that both the high priority requests and low priority requests each have access values that represent no further access should be granted, starting a new access cycle with new access values and priority values as recited in the context of independent claims 18, 19 and 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONTACT INFORMATION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LBZ


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